

Fig. 1

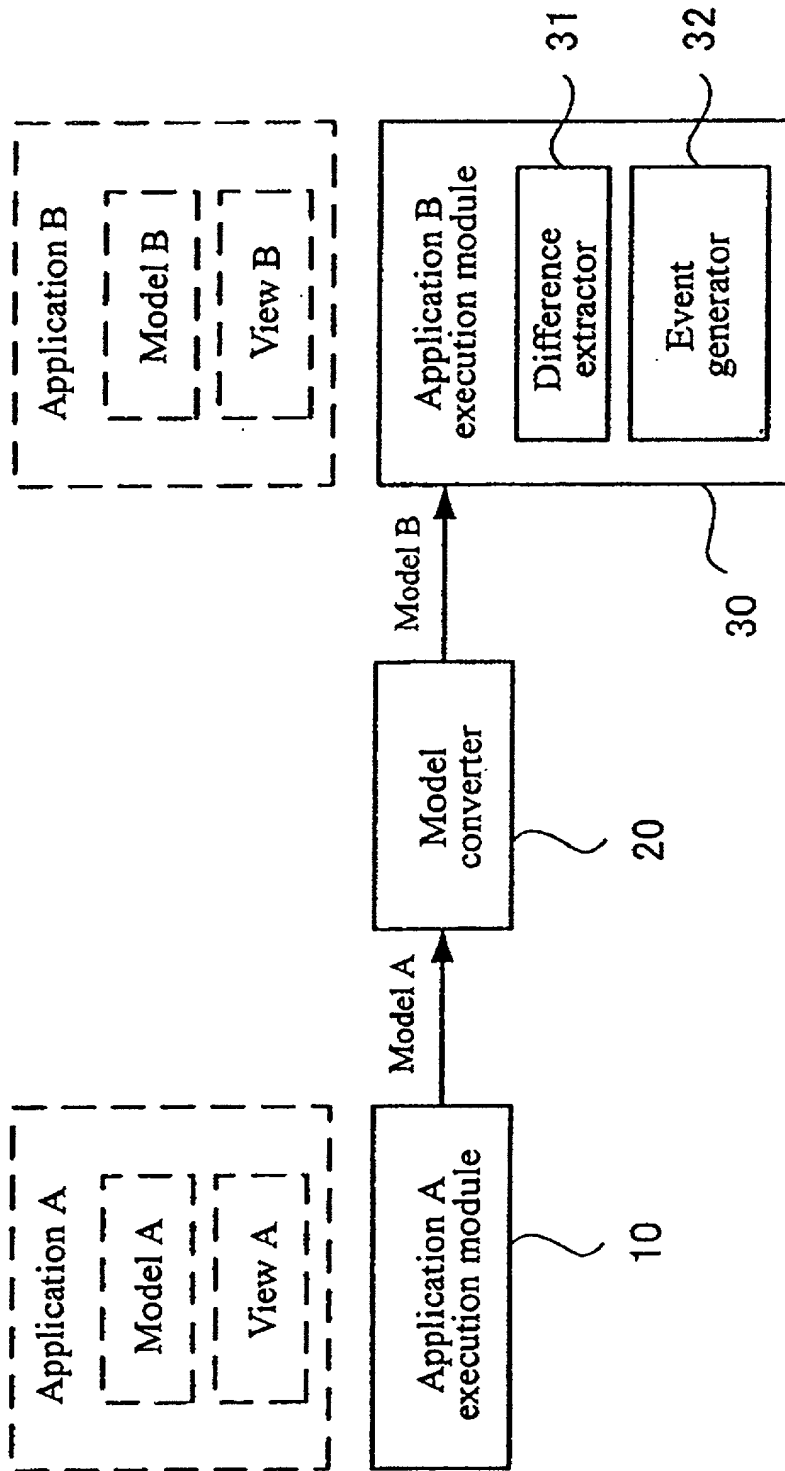


Fig. 2

[illegible]

View B

View A

View

Model

Model conversion

Model A

Application A

Model B

Application B

Fig. 3

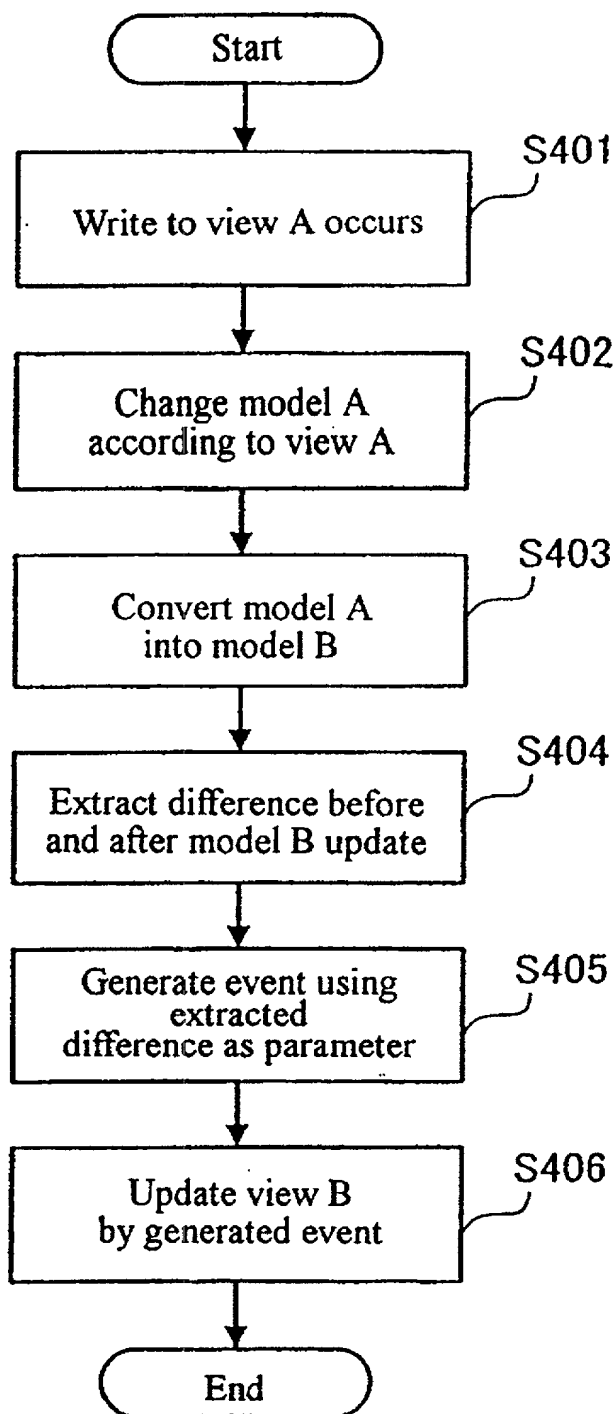
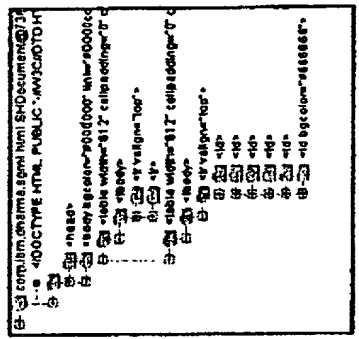


Fig. 4

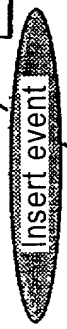
Patent & Trademark Office



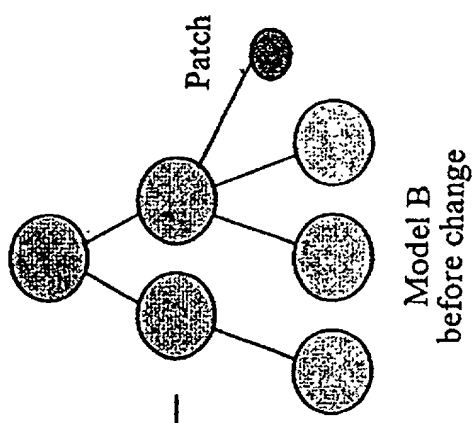
S406



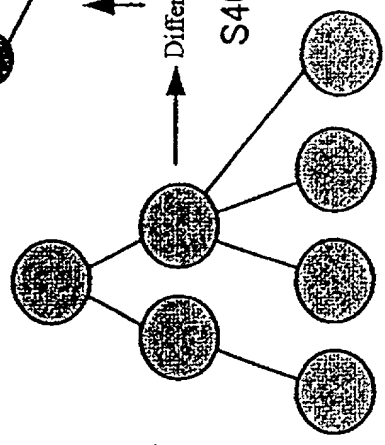
View B



S405



Model B
before change



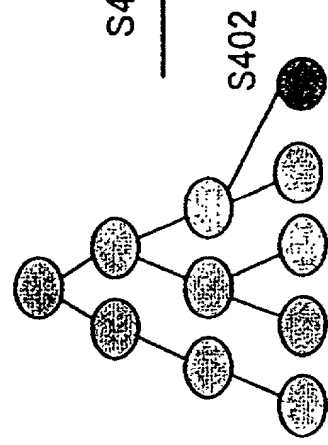
Changed
model B

Difference

S404

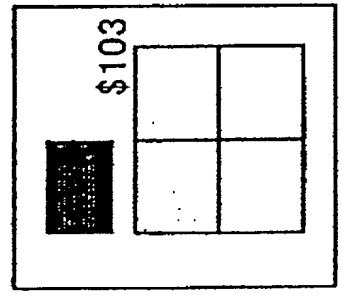


S403



Model A

S401



View A

View

Fig. 5

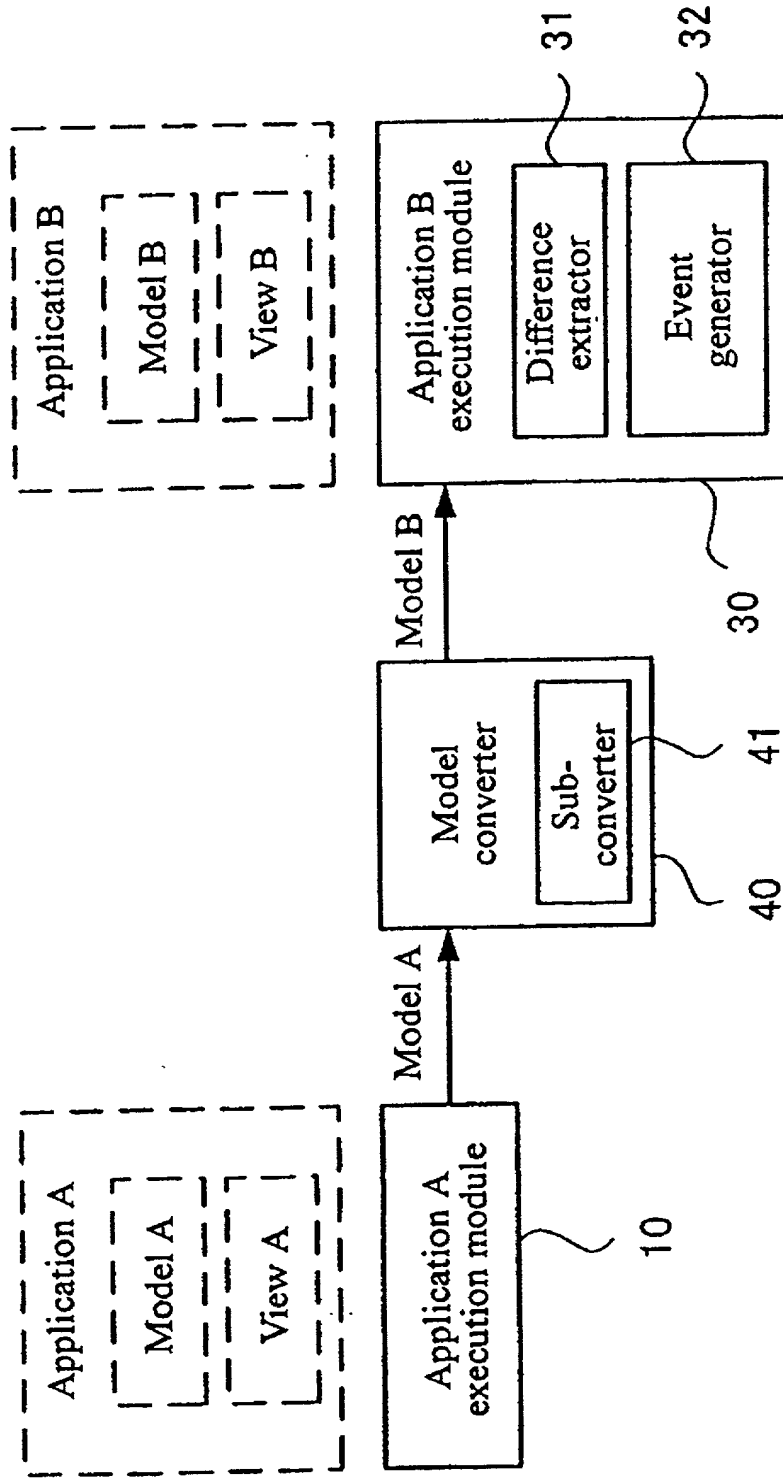


Fig. 6

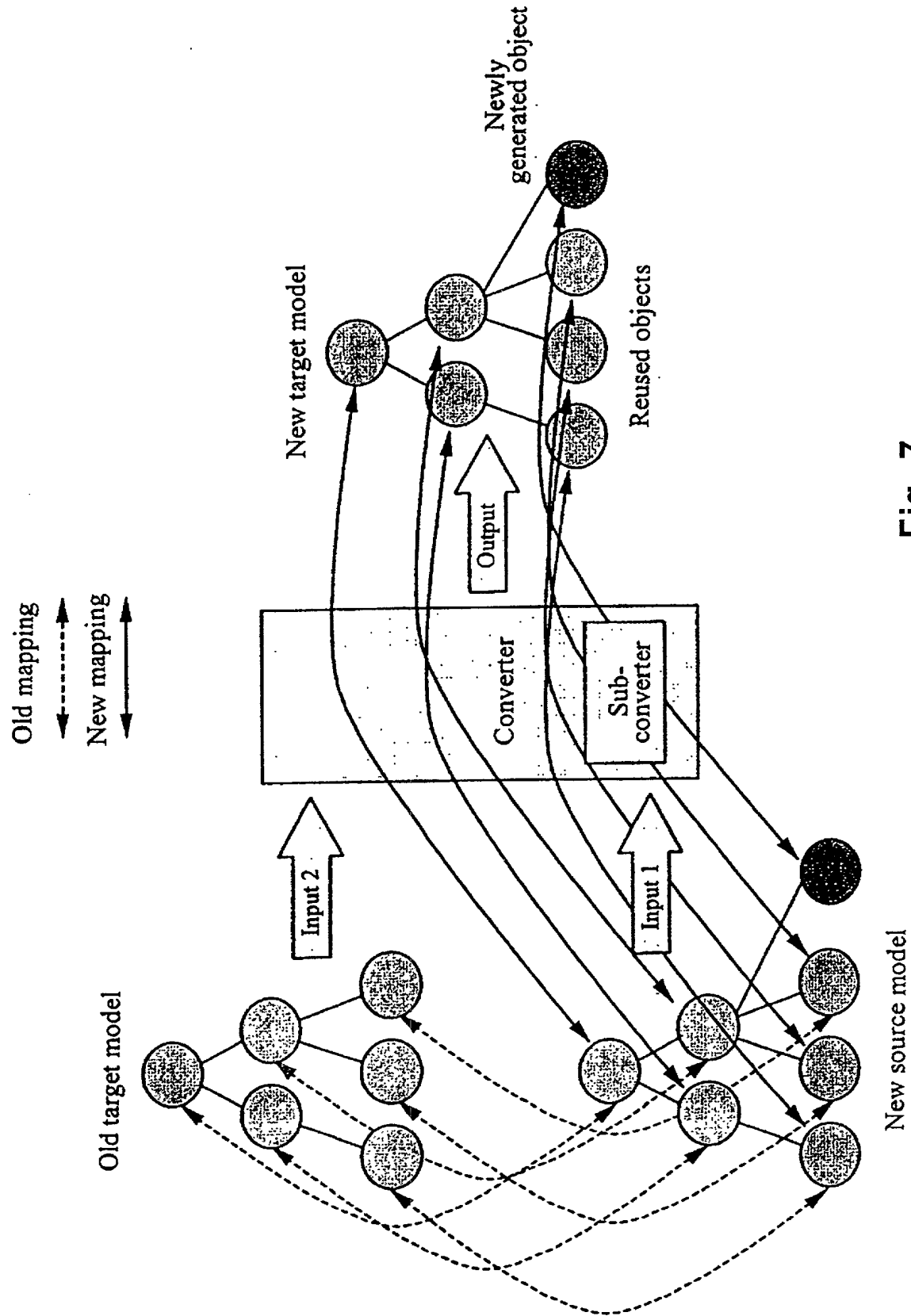


Fig. 7



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Old mapping
New mapping

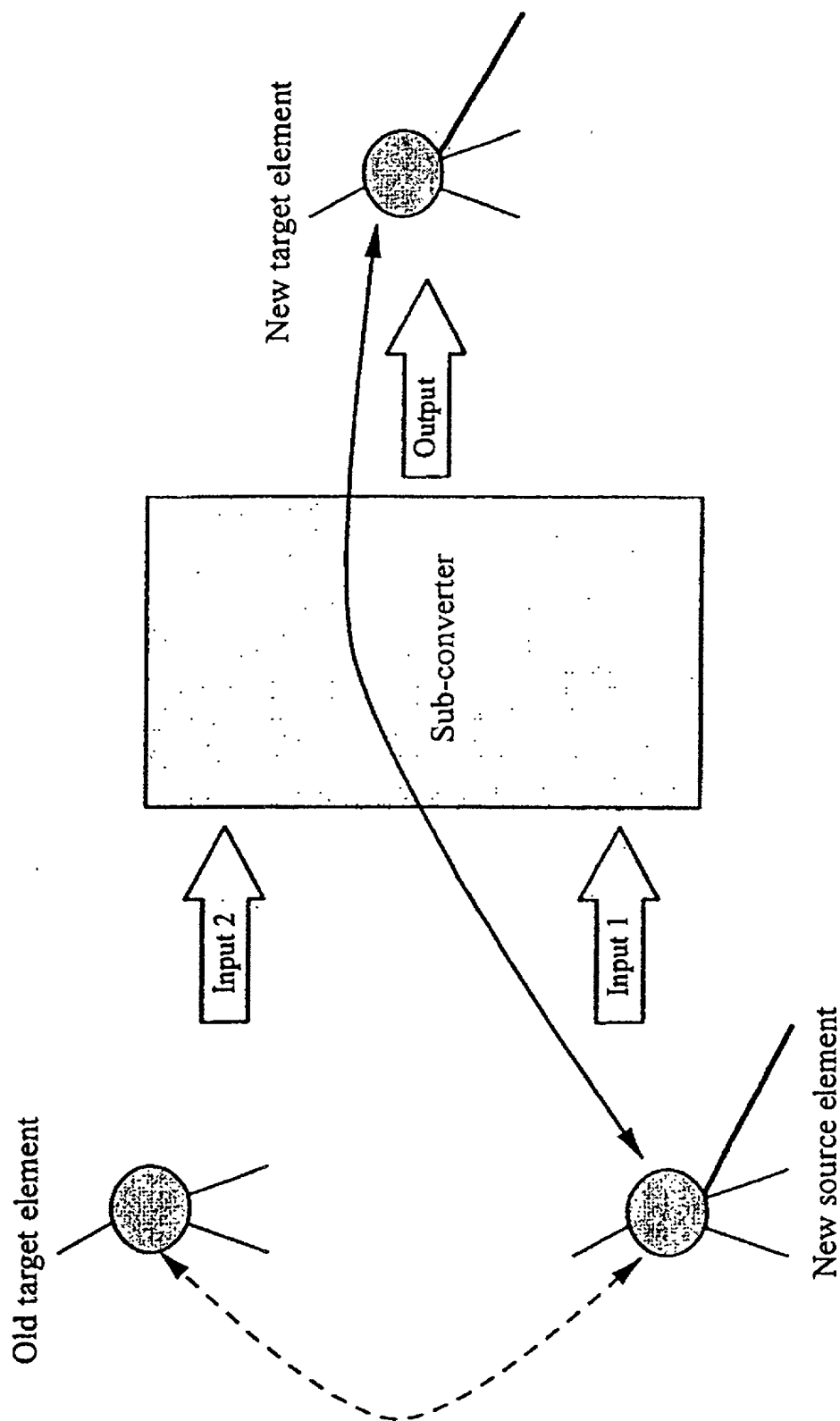


Fig. 8

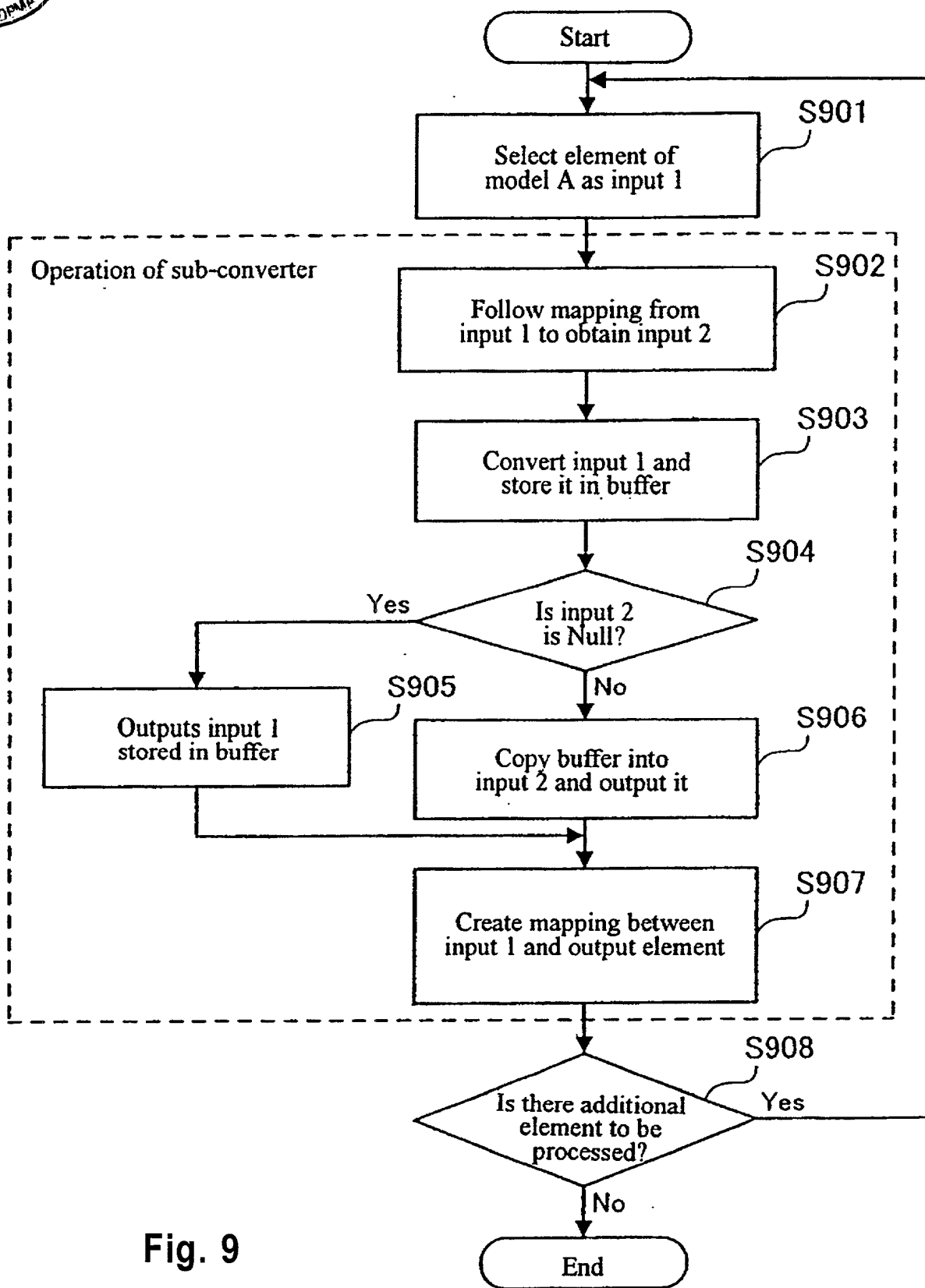
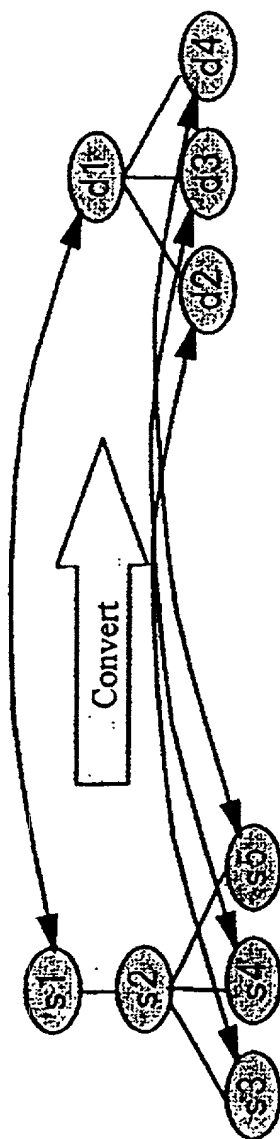
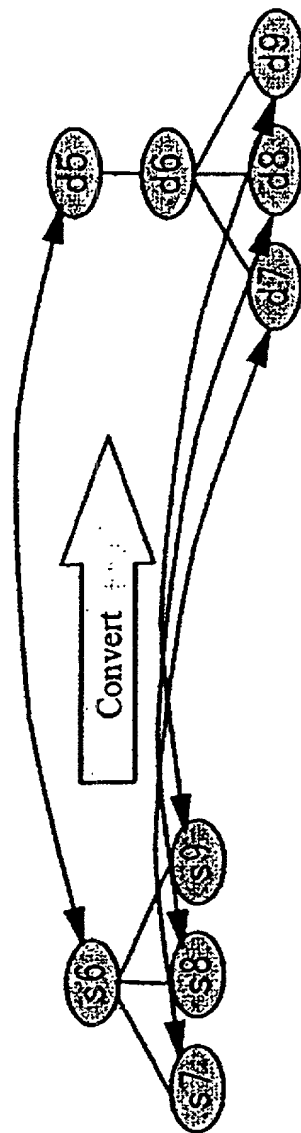


Fig. 9

(A) Decrease type



(B) Increase type



(C) Multiplying type

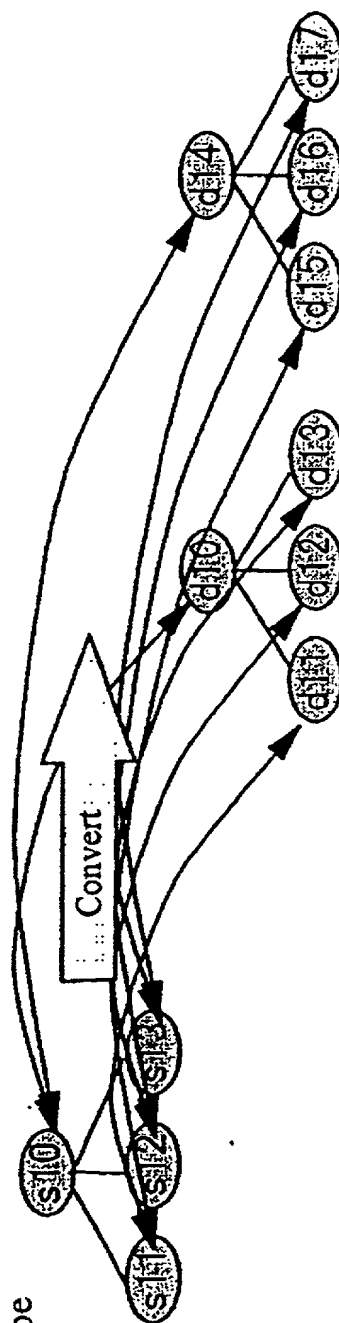


Fig. 10

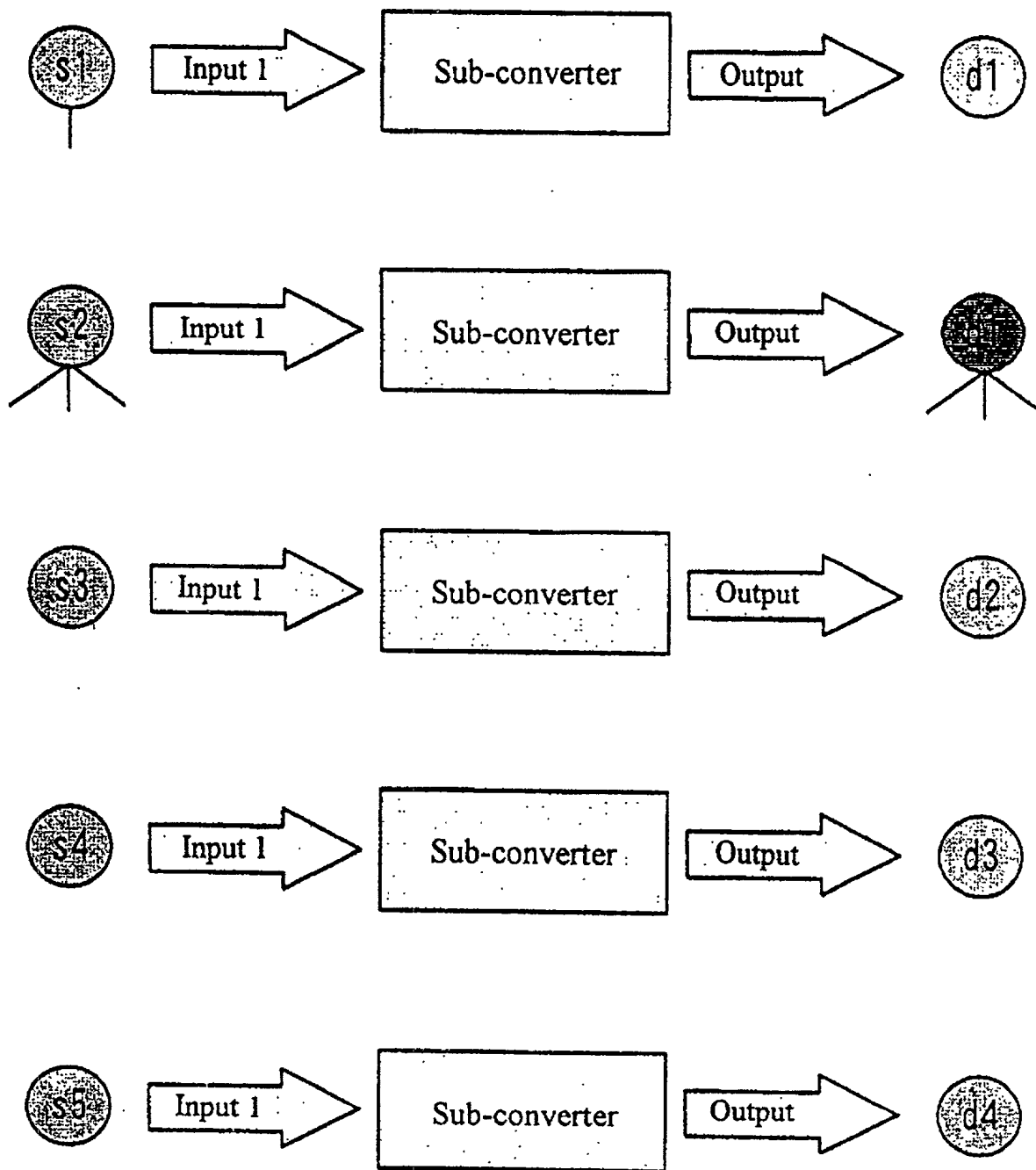


Fig. 11

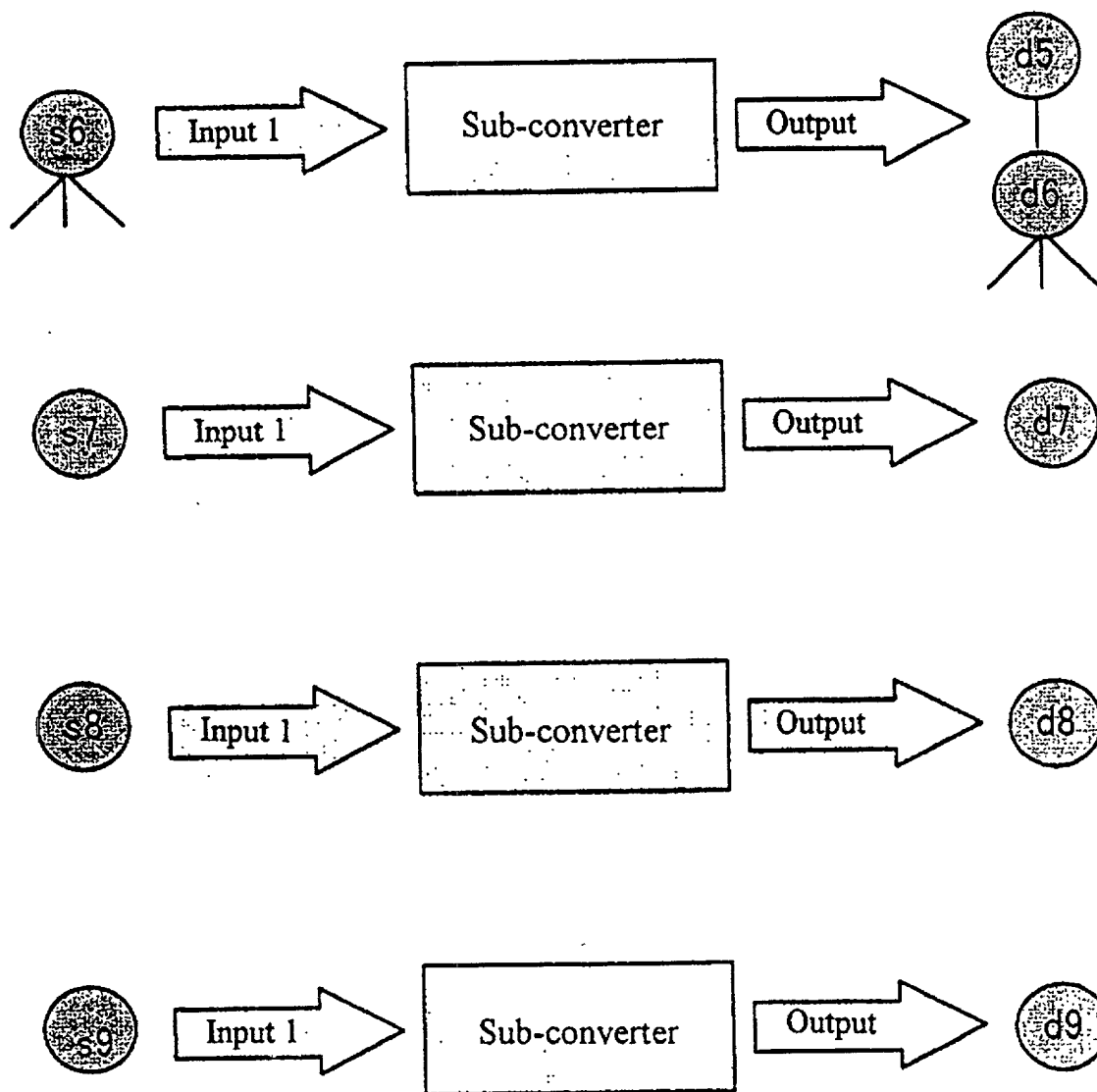


Fig. 12



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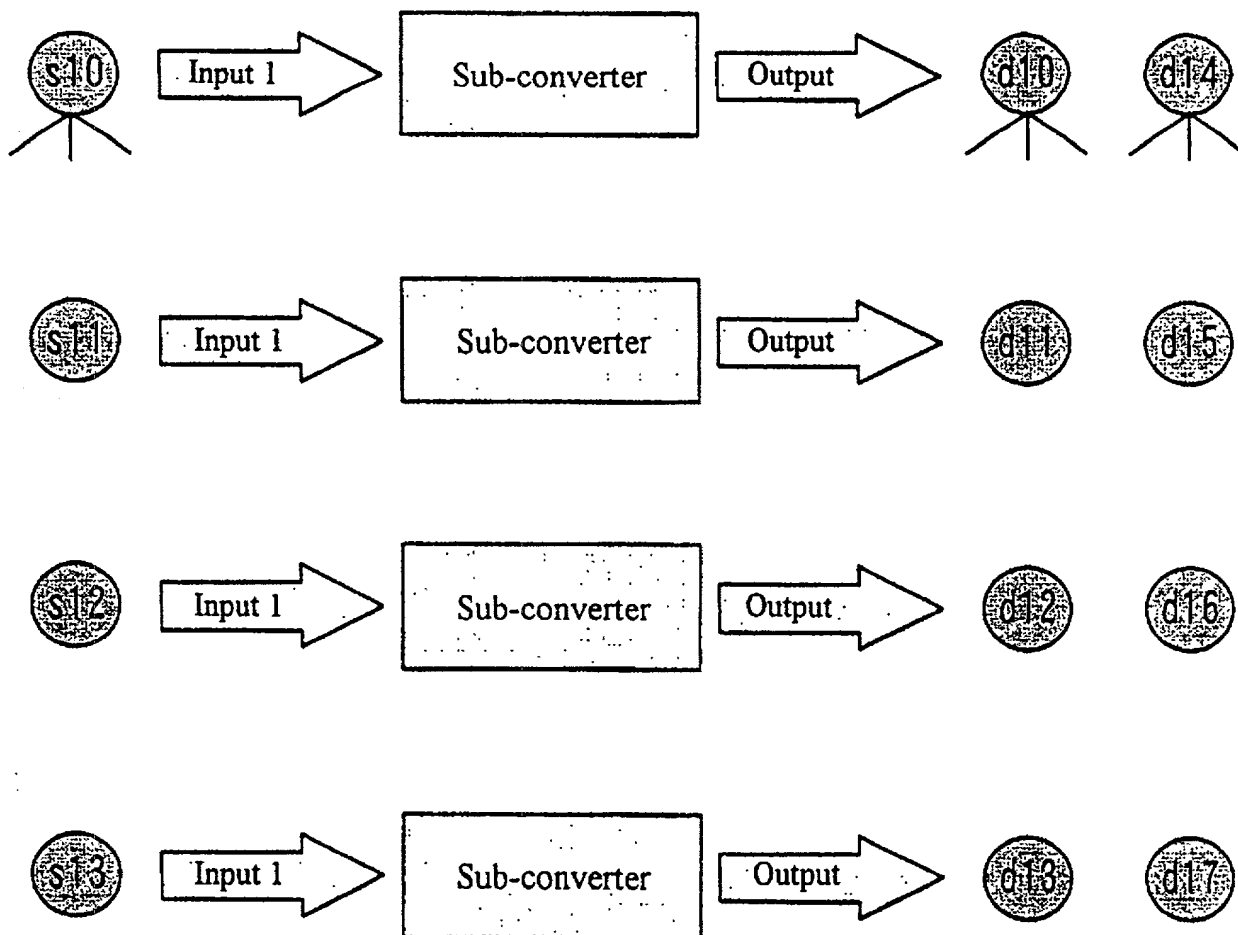


Fig. 13



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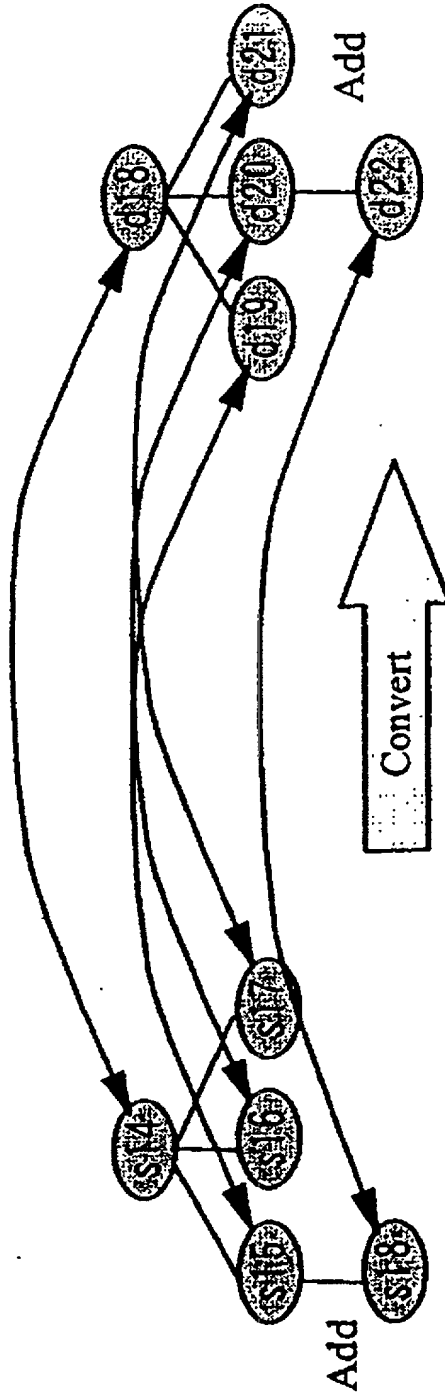


Fig. 14

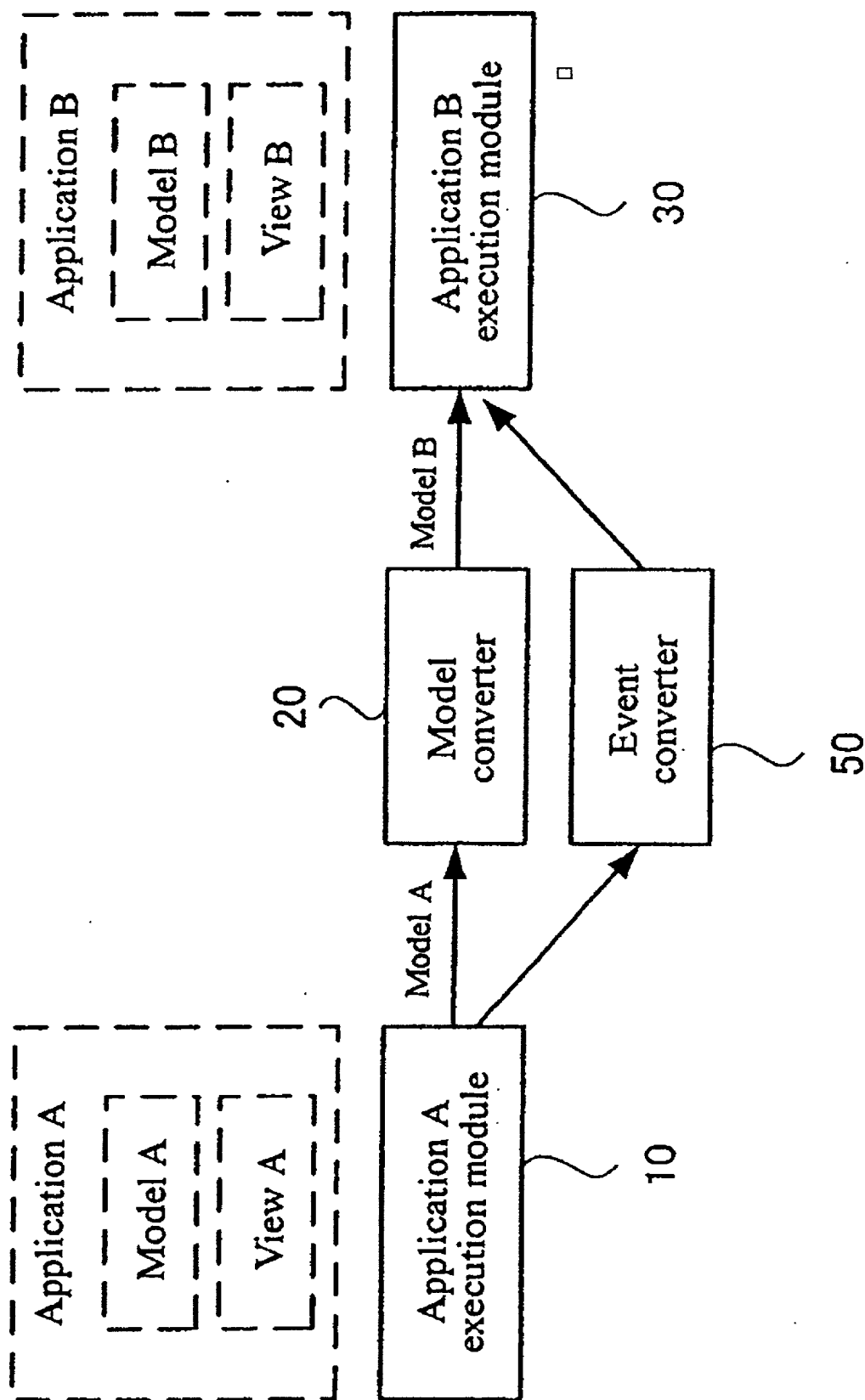


Fig. 15

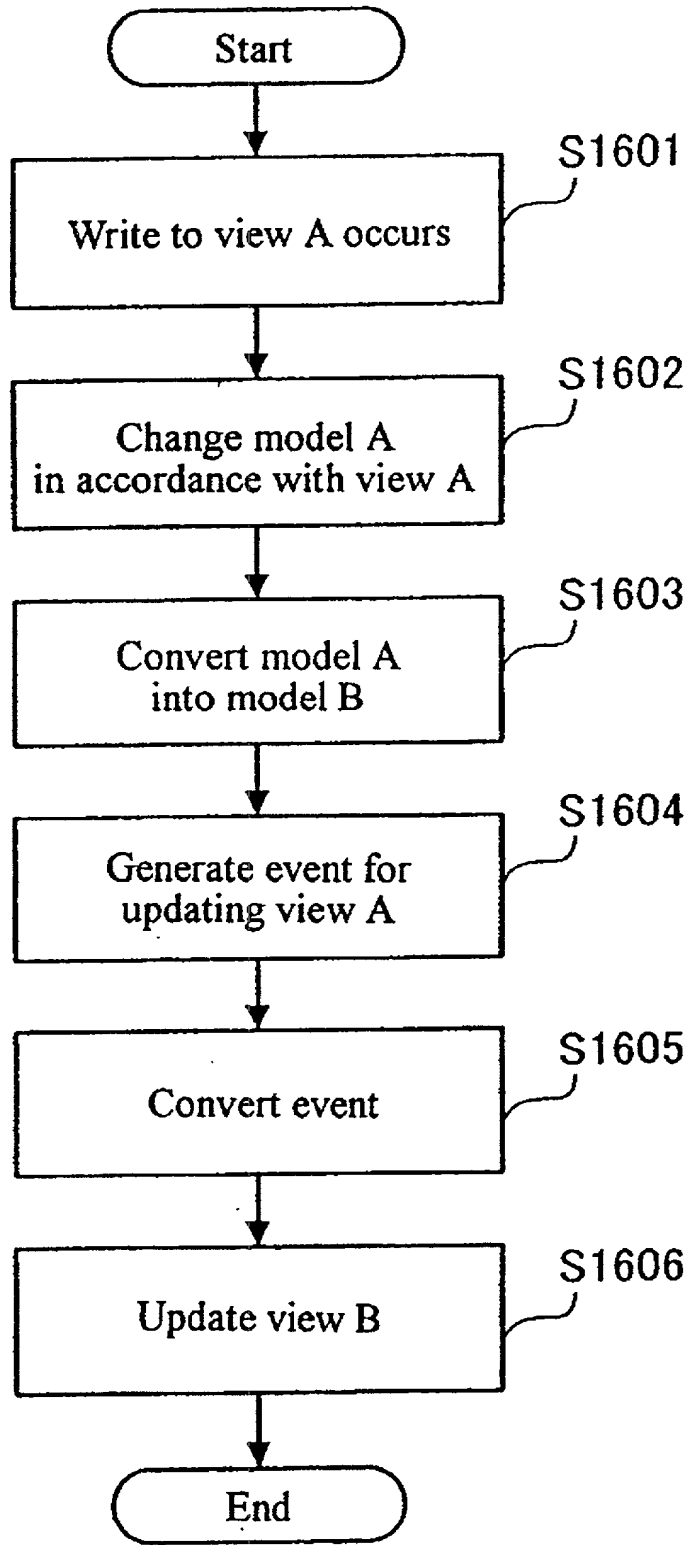


Fig. 16

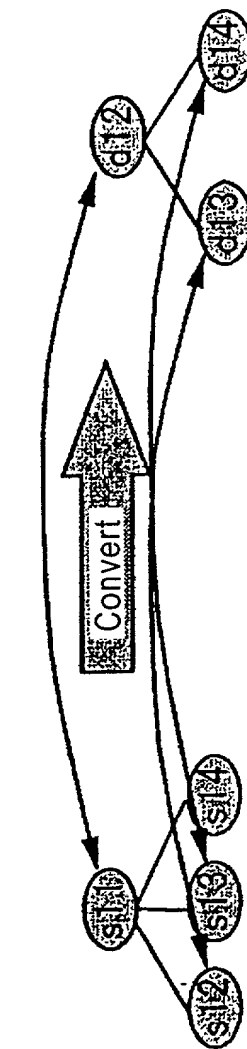
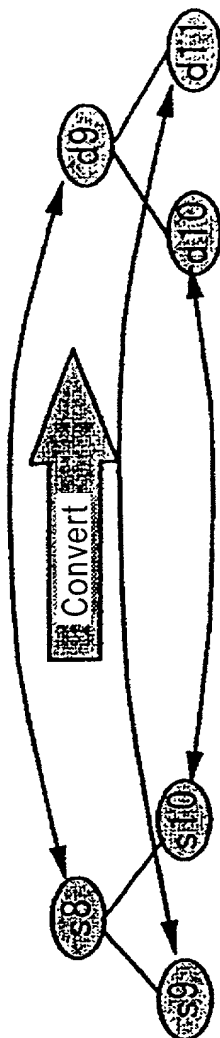
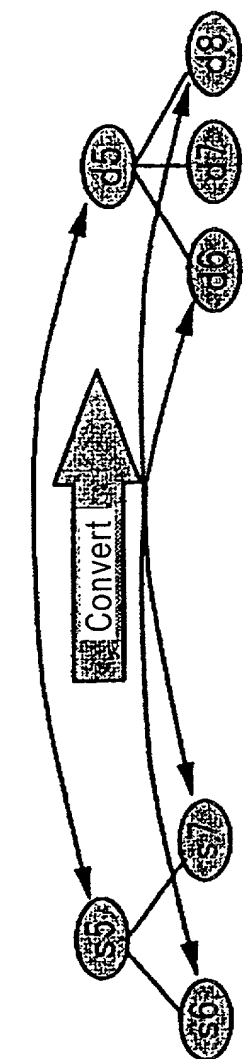
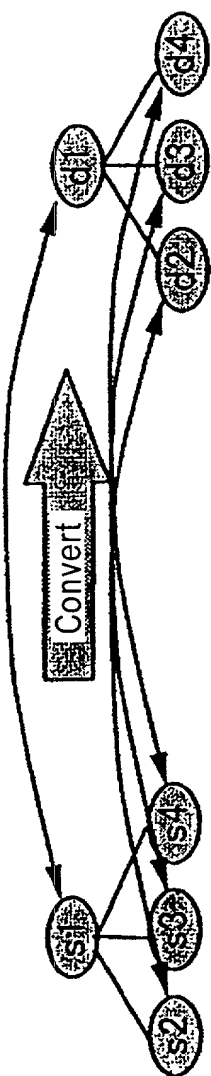


Fig. 18

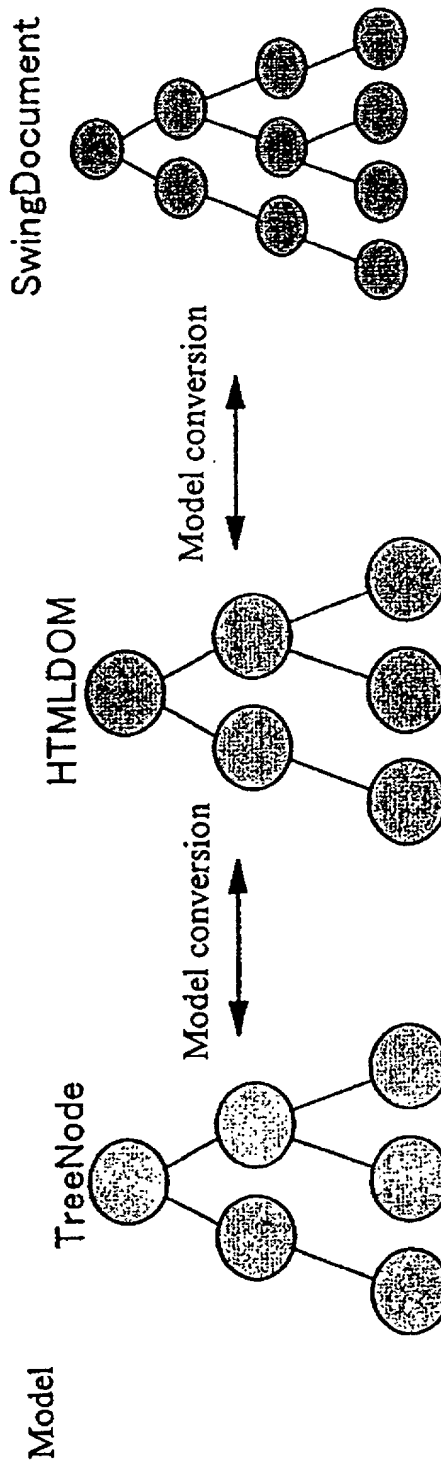
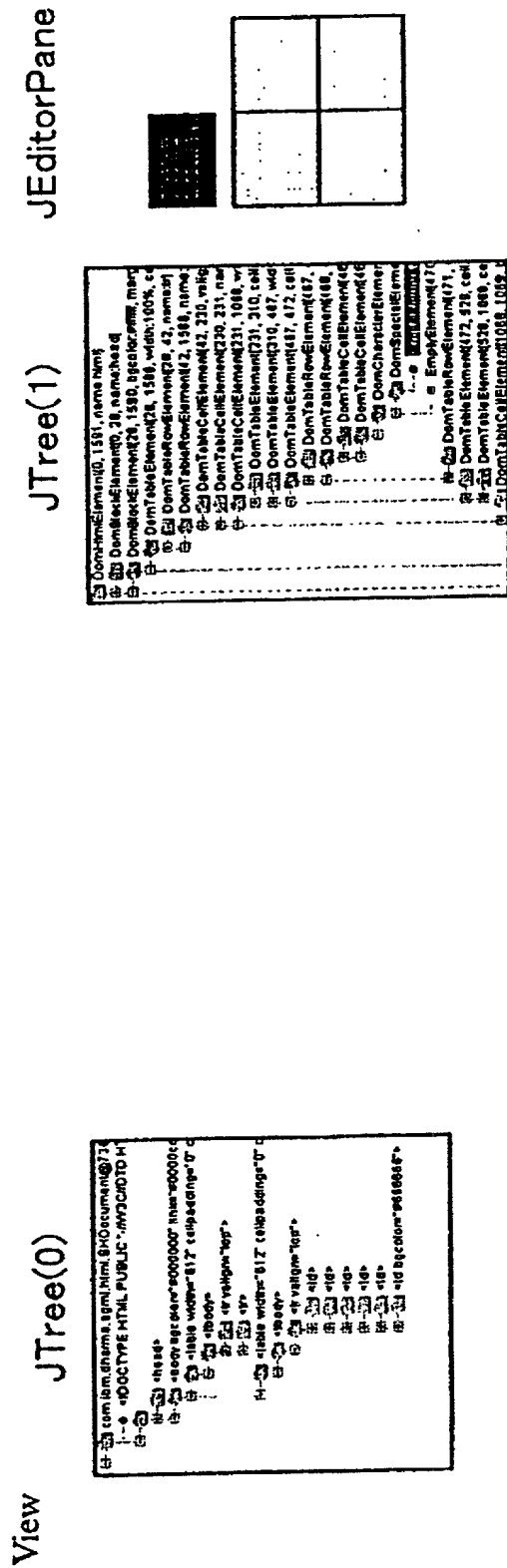
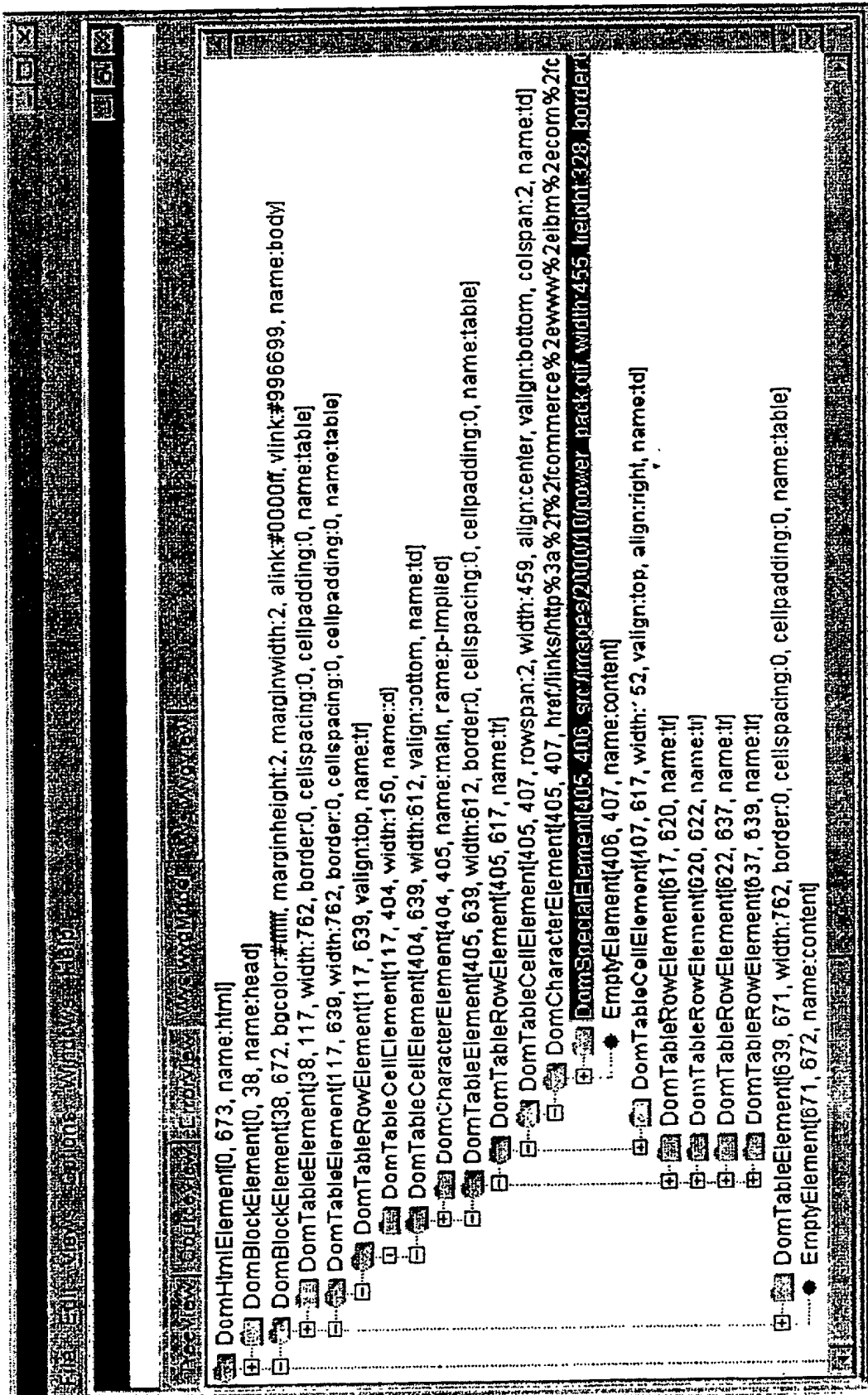


Fig. 19

Fig. 20





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POWERPACKED OFFER

File Edit View Options Windows Help

File View Favorites Home Recent Web Sites

Government

→ Developers

→ IBM Business Partners

→ Job seekers

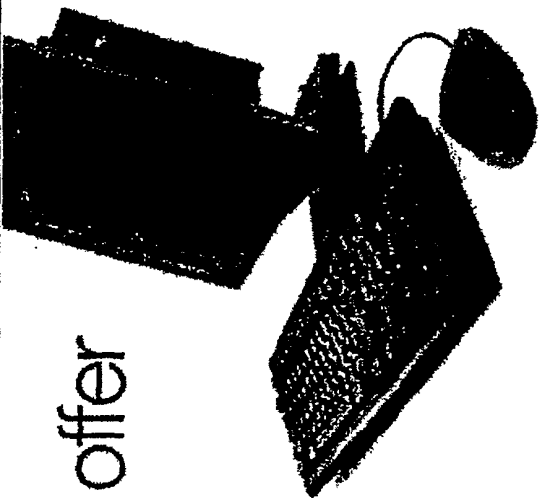
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→ Journalists

→ IBM Worldwide

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Special offer on a battery backup system when you buy select ThinkPad notebooks and desktop computers. (U.S. only)



IBM to build \$300 million chip facility in Shanghai

e-business hosting

IBM @server

Self-service support

e-business

Fig. 22



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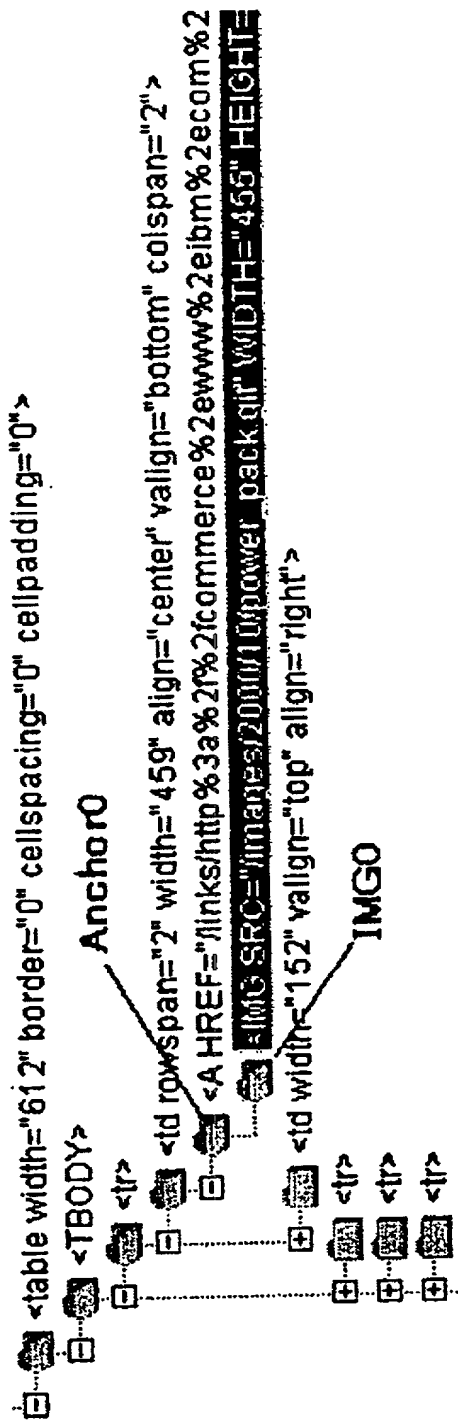


Fig. 23



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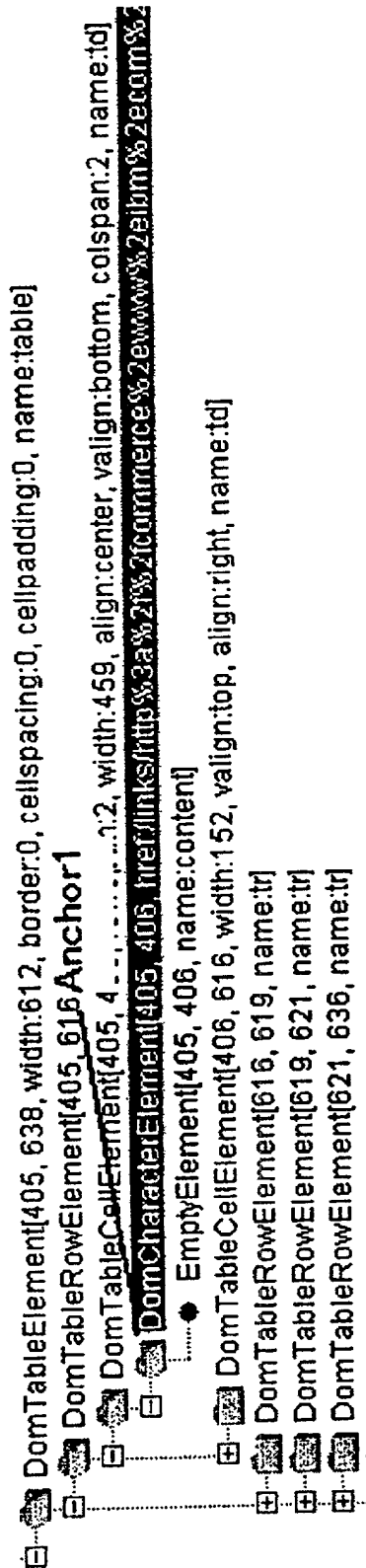
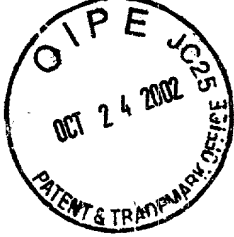


Fig. 26



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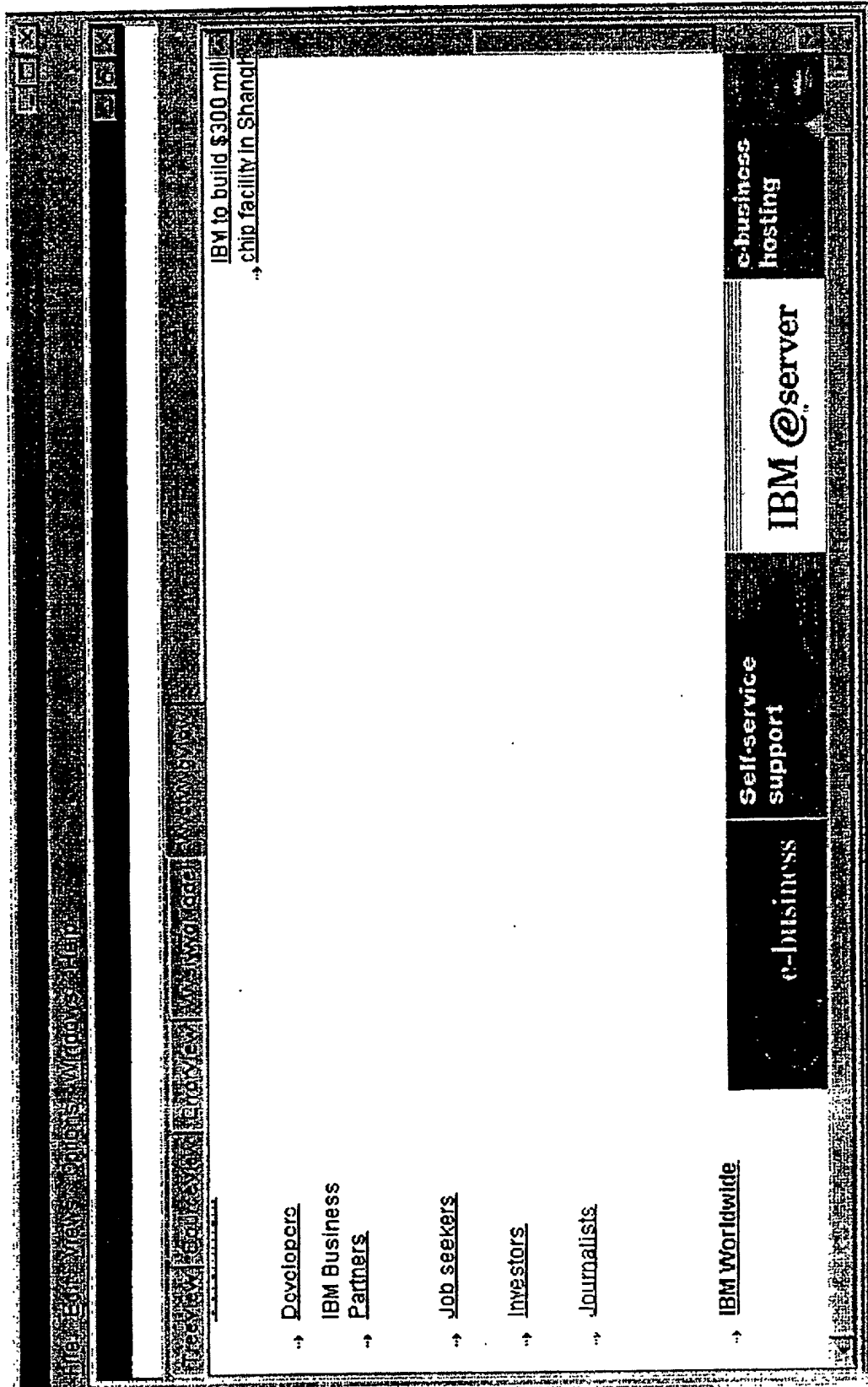
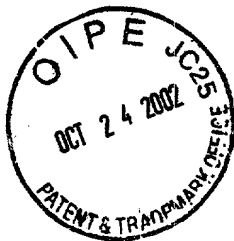


Fig. 27

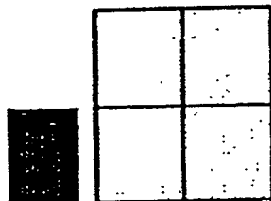


View

TreeEditor

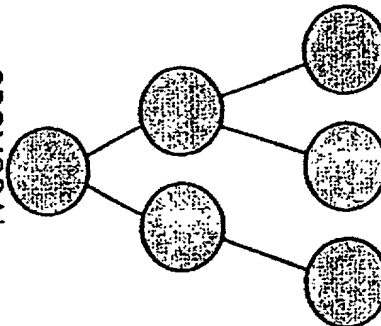
```
<?xml version="1.0" encoding="UTF-8" ?>
<html>
  <head>
    <title>TreeEditor</title>
  </head>
  <body>
    <table border="1">
      <tr>
        <td>1</td>
        <td>2</td>
      </tr>
      <tr>
        <td>3</td>
        <td>4</td>
      </tr>
    </table>
  </body>
</html>
```

HTMLViewer



Model

TreeNode



HTMLDOM

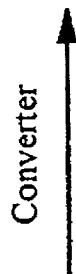
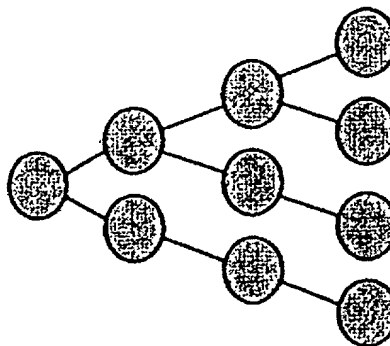


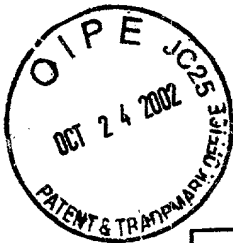
Fig. 28



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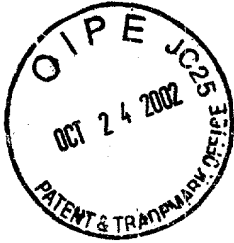
<?xml version="1.0"?>
<!ELEMENT discussion thread*>
<!ATTLIST discussion name CDATA #REQUIRED>
<!ELEMENT thread statement+>
<!ATTLIST thread id ID #IMPLIED>
<!ELEMENT statement (content, statement*)>
<!ATTLIST statement
 subject CDATA ""
 writtenby CDATA "anonymous"
 id ID #IMPLIED
>
<!ELEMENT content #PCDATA>

Fig. 29



```
<?xml version="1.0"?>
<xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xmlns="http://www.w3.org/TR/xhtml1/strict">
<xsl:template match="discussion">
  <html>
    <head>
      <title>
        <xsl:valueof select="@name"/>
      </title>
    </head>
    <body>
      <xsl:apply-templates/>
    </body>
  </html>
</xsl:template>
<xsl:template match="thread">
  <ul>
    <xsl:apply-templates/>
  </ul>
</xsl:template>
<xsl:template match="statement">
  <li><b><xsl:valueof select="@subject"/></b> - <i><xsl:valueof
select="@writtenby"/></i><br/>
    <xsl:apply-templates select="content"/>
  <ul>
    <xsl:apply-templates select="statement"/>
  </ul>
</li>
</xsl:template>
<xsl:template match="content">
  <xsl:apply-templates/>
</xsl:template>
```

Fig. 30



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```
<?xml encoding="US-ASCII"?>  
<!DOCTYPE discussion SYSTEM "discussion.dtd">  
<discussion name="Transformer Discussion">  
  <thread id="1">  
    <statement subject="Test" writtenby="kondo">  
      <content>This is a test.</content>  
    </statement>  
  </thread>  
</discussion>
```

Fig. 31



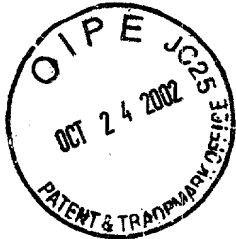
```
<html>
<head>
<title>Transformer Discussion</title>
</head>
<body>
<ul>
<li><b>Test</b> - <i>kondo</i><br>
This is a test.
<ul>
</ul>
</ul>
</body>
</html>
```

Fig. 32



```
<html>
<head>
<title>Transformer Discussion</title>
</head>
<body>
<ul>
<li><b>Test</b> - <i>kondo</i><br>
This is a test.
<ul>
<li><b>OK</b> - <i>anonymous</i><br>
OK
</ul>
</ul>
</body>
</html>
```

Fig. 33



Source

	Sales	Recurring profit	Current profit
Company I	1000	100	50
Company F	400	80	40
Company H	600	50	25

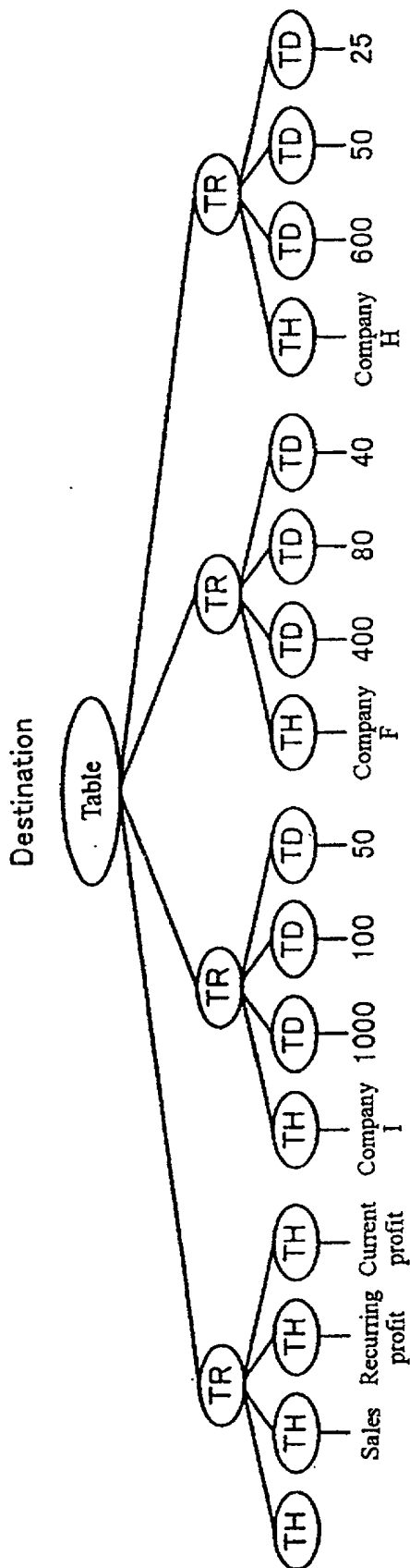


Fig. 34



Source	Sales	Recurring profit
Company I	1000	100
Company F	400	80
Company H	600	50

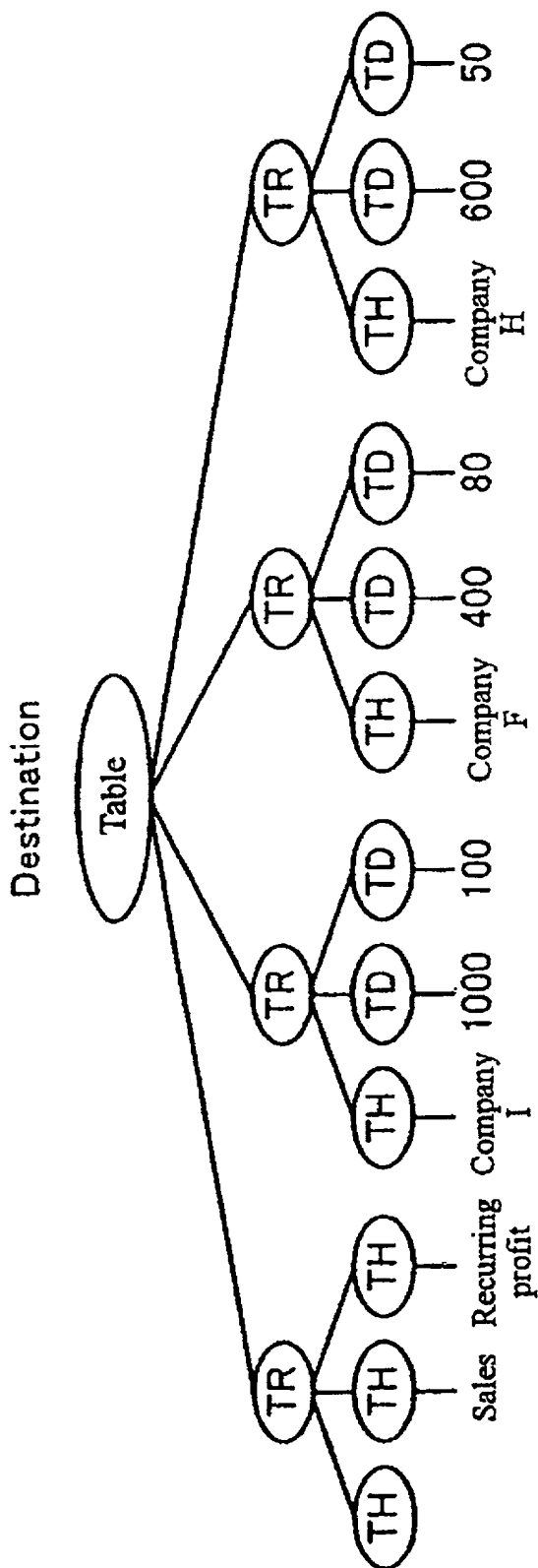
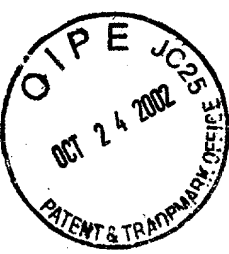
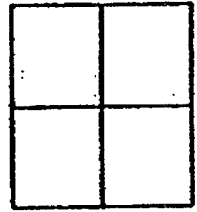
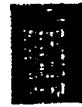


Fig. 35



Oct 24 2002



Views

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<title>Title</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>
<body>
<table border="1">
|  |  |
| --- | --- |
| 1 | 2 |
| 3 | 4 |


</body>
</html>
```

```
<html>
<body>
...
</body>
</html>
```



Model

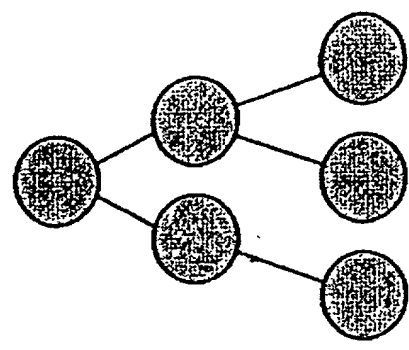


Fig. 36

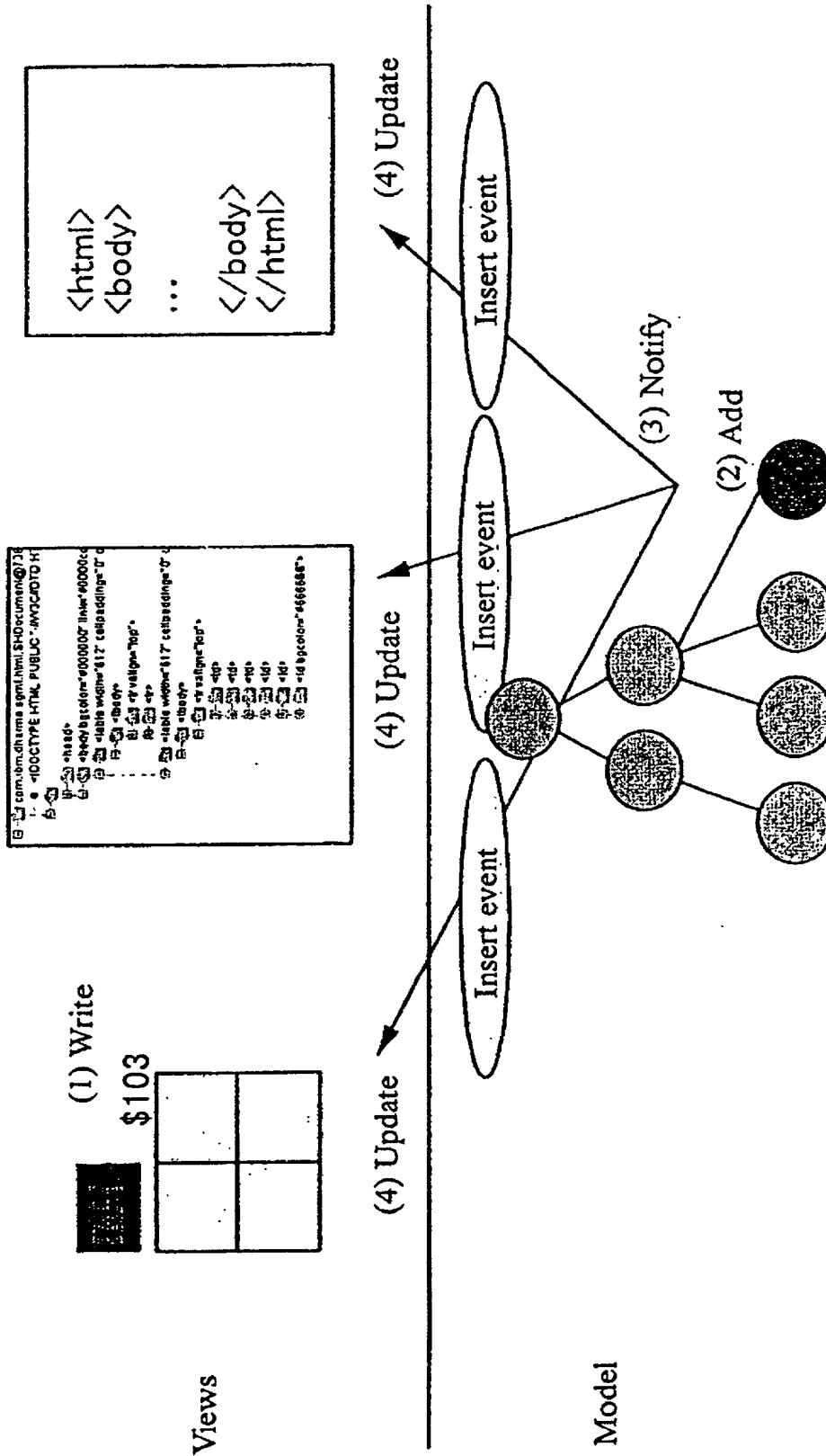
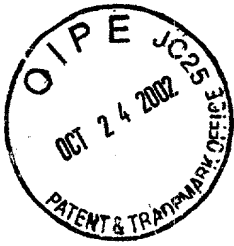
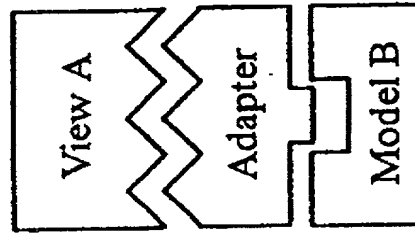


Fig. 37



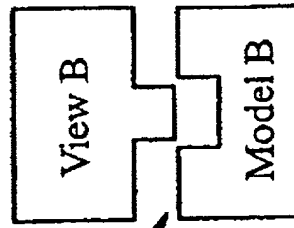
(B)

Application B
with view A



(A)

Application B



Interface

Application A

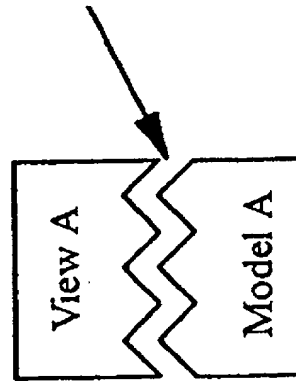


Fig. 38

Fig. 39

